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jan.delaval@uspto.gov

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provided by InfoChem.

STRUCTURE FILE UPDATES:    5 NOV 2002  HIGHEST RN 470660-68-5
DICTIONARY FILE UPDATES:   5 NOV 2002  HIGHEST RN 470660-68-5

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available.  See HELP
PROPERTIES for more information.  See STNote 27, Searching Properties
in the CAS Registry File, for complete details:
http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf

=> d ide can l1

L1   ANSWER 1 OF 1  REGISTRY  COPYRIGHT 2002 ACS
RN   58-85-5  REGISTRY
CN   1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-,
     (3aS,4S,6aR)- (9CI)  (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN   1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-,
     [3aS-(3a.alpha.,4.beta.,6a.alpha.)]-
CN   Biotin (8CI)
OTHER NAMES:
CN   (+)-Biotin
CN   (+)-cis-Hexahydro-2-oxo-1H-thieno[3,4]imidazole-4-valeric acid
CN   255: PN: EP1223534 SEQID: 255 claimed sequence
CN   Bioepiderm
CN   Bios II
CN   cis-(+)-Tetrahydro-2-oxothieno[3,4]imidazoline-4-valeric acid
CN   Coenzyme R
CN   D(+)-Biotin
CN   D-Biotin
CN   d-Biotin
CN   Factor S
CN   Factor S (vitamin)
CN   Lutavit H2
CN   Meribin
CN   Rovimix H 2
CN   Vitamin B7
CN   Vitamin H
FS   STEREOSEARCH
DR   58073-87-3, 15720-24-8, 22879-79-4, 3672-05-7
MF   C10 H16 N2 O3 S
CI   COM
LC   STN Files:   ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS,
       BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN,
       CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DIOGENES, DRUGU,
       EMBASE, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*,
       MSDS-OHS, NIOSHTIC, PHAR, PIRA, PROMT, RTECS*, SPECINFO, TOXCENTER,
       USAN, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
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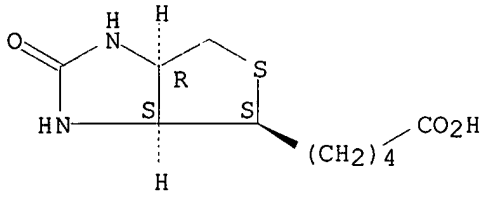
Other Sources: DSL**, EINECS**, TSCA**, WHO
(**Enter CHEMLIST File for up-to-date regulatory information)

Absolute stereochemistry. Rotation (+).



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

9399 REFERENCES IN FILE CA (1962 TO DATE)
2038 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
9447 REFERENCES IN FILE CAPLUS (1962 TO DATE)
8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 137:284345

REFERENCE 2: 137:284329

REFERENCE 3: 137:279186

REFERENCE 4: 137:279008

REFERENCE 5: 137:278091

REFERENCE 6: 137:277937

REFERENCE 7: 137:277849

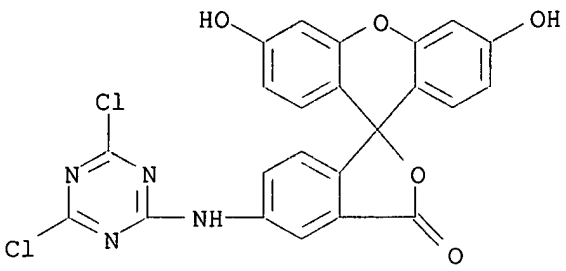
REFERENCE 8: 137:275383

REFERENCE 9: 137:275376

REFERENCE 10: 137:275370

=> d ide can l10

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **51306-35-5** REGISTRY
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 5-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-3',6'-dihydroxy- (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 5-(4,6-Dichlorotriazinyl)aminofluorescein
CN 5-[(4,6-Dichlorotriazin-2-yl)amino]fluorescein
CN DTAF
FS 3D CONCORD
DR 102417-95-8, 93265-91-9, 208666-23-3
MF C23 H12 Cl2 N4 O5
CI COM
LC STN Files: BEILSTEIN*, BIOBUSINESS, BIOSIS, CA, CANCERLIT, CAPLUS, CASREACT, CHEMCATS, CSCHEM, MEDLINE, PIRA, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)



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98 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 137:58927

REFERENCE 2: 137:10852

REFERENCE 3: 136:365948

REFERENCE 4: 136:246798

REFERENCE 5: 136:113267

REFERENCE 6: 136:2242

REFERENCE 7: 135:341178

REFERENCE 8: 134:362193

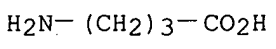
REFERENCE 9: 134:350284

REFERENCE 10: 134:350243

=> d ide can l16

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2002 ACS
RN **56-12-2** REGISTRY
CN Butanoic acid, 4-amino- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Butyric acid, 4-amino- (7CI, 8CI)
OTHER NAMES:
CN .gamma.-Aminobutanoic acid
CN .gamma.-Aminobutyric acid
CN .omega.-Aminobutyric acid
CN 3-Carboxypropylamine
CN 4-Aminobutanoic acid
CN 4-Aminobutyric acid
CN Aminalon
CN GABA
CN Gaballon
CN Gamarex
CN Gammalon
CN Gammalone
CN Gammar
CN Gammasol
CN Mielogen

CN Mielomade
CN Piperidic acid
CN Piperidinic acid
FS 3D CONCORD
DR 3131-86-0
MF C4 H9 N O2
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CABA, CANCERLIT, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHEM, DDFU, DETHERM*, DRUGU, EMBASE, GMELIN*, HODOC*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PROMT, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, ULIDAT, USAN, USPAT2, USPATFULL, VETU
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)



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1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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REFERENCE 2: 137:278935

REFERENCE 3: 137:278503

REFERENCE 4: 137:278003

REFERENCE 5: 137:277168

REFERENCE 6: 137:277126

REFERENCE 7: 137:277090

REFERENCE 8: 137:276516

REFERENCE 9: 137:275934

REFERENCE 10: 137:274680

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L24 3 SEA FILE=REGISTRY ABB=ON PLU=ON L2 AND 46.492/RID AND 7938.12/RID

=> d sta que l25
L25 0 SEA FILE=REGISTRY ABB=ON PLU=ON 'ABU'GVVNARSLK|'ABU'SQNYPIVQK/SQSP

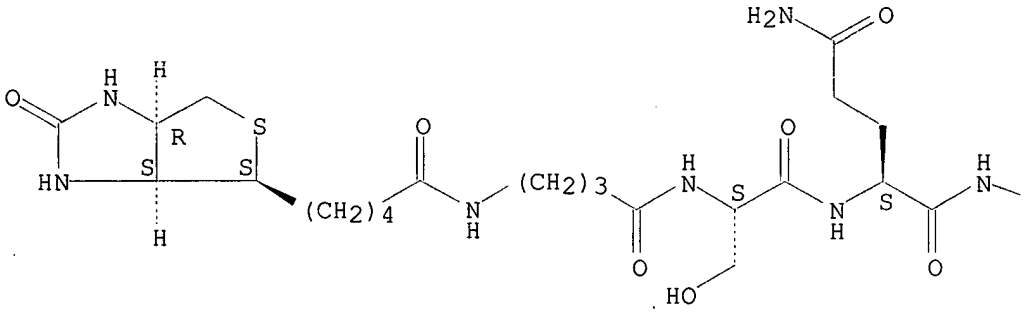
=> d l24 sqide can tot

L24 ANSWER 1 OF 3 REGISTRY COPYRIGHT 2002 ACS
RN 375366-96-4 REGISTRY
CN L-Lysinamide, N-[4-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxobutyl]-L-seryl-L-glutaminyl-L-asparaginyl-L-tyrosyl-L-prolyl-L-isoleucyl-L-valyl-L-glutaminyl-N6-[4-chloro-6-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]-1,3,5-triazin-2-yl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 9
NTE modified (modifications unspecified)

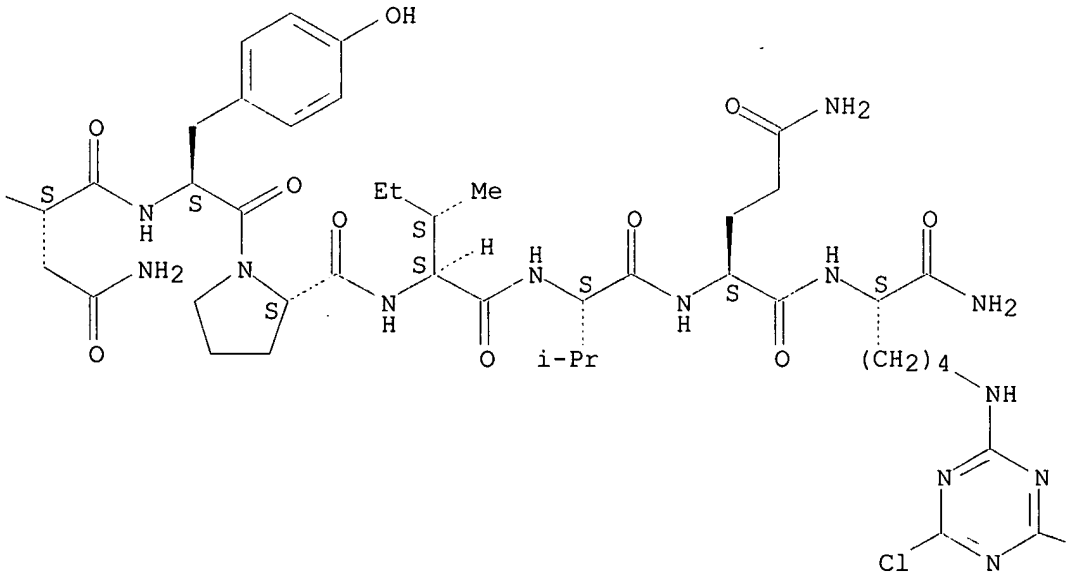
SEQ 1 SQNYPIVQK
MF C85 H110 Cl N21 O22 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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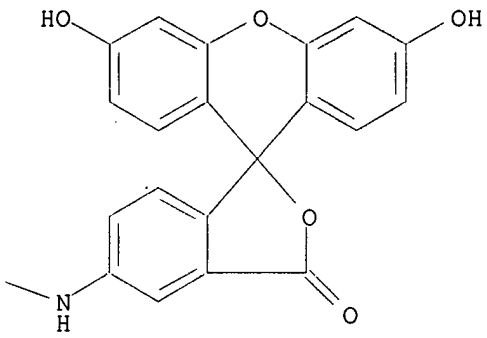


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

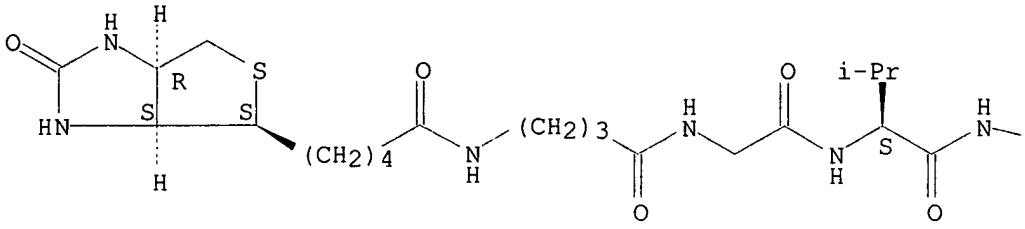
REFERENCE 1: 136:2242

L24 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2002 ACS
RN 375366-95-3 REGISTRY
CN L-Lysinamide, N-[4-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]-1-oxobutyl]glycyl-L-valyl-L-valyl-L-asparaginyl-L-alanyl-L-arginyl-L-seryl-L-leucyl-N6-[4-chloro-6-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]-1,3,5-triazin-2-yl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 9
NTE modified (modifications unspecified)

SEQ 1 GVVNARSLK
MF C77 H107 Cl N22 O19 S
SR CA
LC STN Files: CA, CAPLUS, USPATFULL

Absolute stereochemistry.

PAGE 1-A



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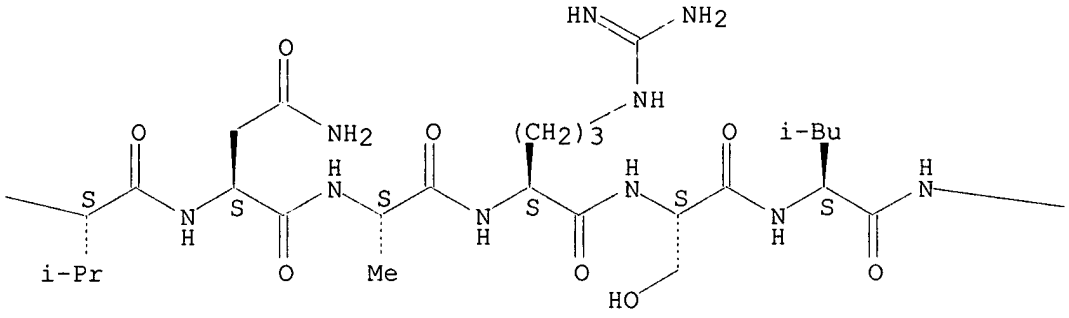

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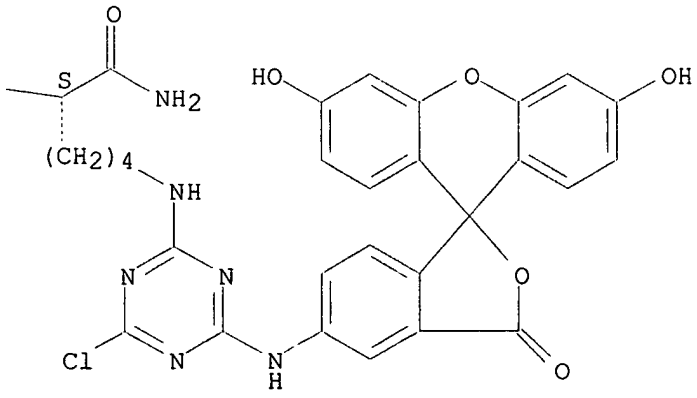


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 136:2242

L24 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2002 ACS
RN 189753-42-2 REGISTRY
CN L-Lysinamide, (2S)-2-[[5-[(3aS,4S,6aR)-hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl]-1-oxopentyl]amino]butanoylglycyl-L-valyl-L-valyl-L-asparaginyl-L-alanyl-L-seryl-L-alanyl-L-arginyl-L-leucyl-N6-[4-chloro-6-[(3',6'-dihydroxy-3-oxospiro[isobenzofuran-1(3H),9'-[9H]xanthen]-5-yl)amino]-1,3,5-triazin-2-yl]- (9CI) (CA INDEX NAME)
FS PROTEIN SEQUENCE; STEREOSEARCH
SQL 11
NTE modified (modifications unspecified)

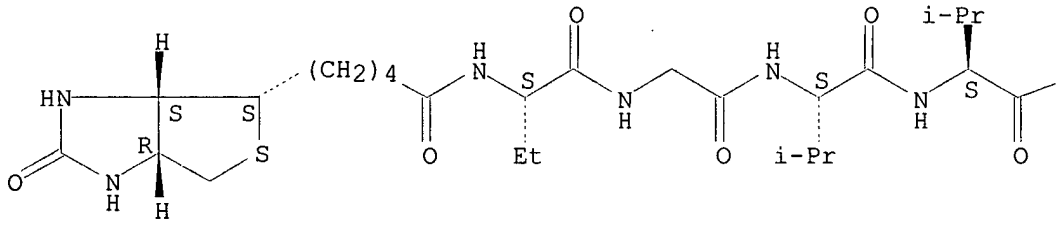
type	------ location ------		description
uncommon	Abu-1	-	-

SEQ 1 XGVVNASARL K

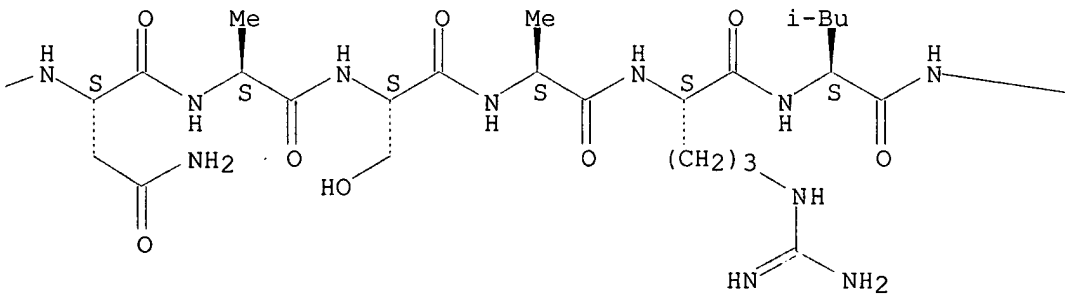
RELATED SEQUENCES AVAILABLE WITH SEQLINK
MF C80 H112 Cl N23 O20 S
SR CA
LC STN Files: CA, CAPLUS

Absolute stereochemistry.

PAGE 1-A



PAGE 1-B



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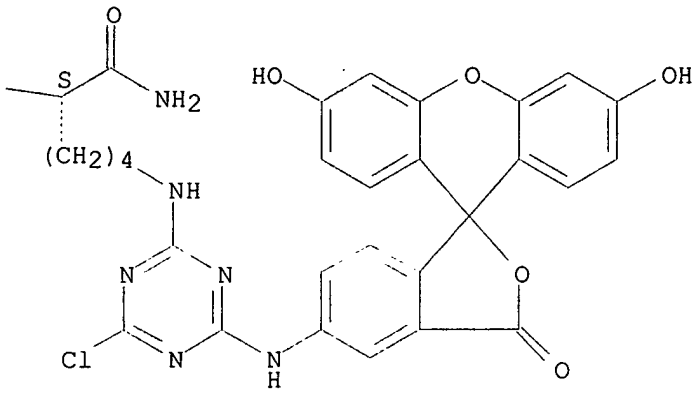

1 REFERENCES IN FILE CA (1962 TO DATE)
1 REFERENCES IN FILE CAPLUS (1962 TO DATE)

REFERENCE 1: 126:327207

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FILE COVERS 1907 - 6 Nov 2002 VOL 137 ISS 19
FILE LAST UPDATED: 5 Nov 2002 (20021105/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

CAS roles have been modified effective December 16, 2001. Please check your SDI profiles to see if they need to be revised. For information on CAS roles, enter HELP ROLES at an arrow prompt or use the CAS Roles thesaurus (/RL field) in this file.

=> d all tot 127

L27 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:868975 HCAPLUS
DN 136:2242
TI Fluorescence polarization method for determining protease activity
IN **Levine, Leanna M.; Toth, Mihaly V.**
PA G.D. Searle & Co., USA
SO U.S. Pat. Appl. Publ., 10 pp., Cont. of U.S. Ser. No. 246,787, abandoned.
CODEN: USXXCO
DT Patent

LA English
IC ICM C12Q001-70
ICS G01N033-53; C07K005-00; A61K038-04
NCL 435005000
CC 7-1 (Enzymes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2001046668	A1	20011129	US 2001-880654	20010613
PRAI	US 1994-327170	B1	19941021		
	US 1997-867258	B1	19970602		
	US 1999-246787	B1	19990208		

OS MARPAT 136:2242
AB A fluorescence polarization method of detg. protease activity is described. The method comprises incubating a mixt. of a protease of interest and a protease-selective substrate so that the protease may cleave the substrate. The substrate is capable of being bound to an anchor, and the substrate also includes a fluorescent radical. After the incubation period the substrate is attached to the anchor, if not previously attached. The amt. of cleaved substrate is detd. by monitoring the change in the total fluorescence polarization of the mixt.
ST protease detn fluorescence polarization
IT Proteins
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(**biotin**-selective; fluorescence polarization method for detg. protease activity)
IT Antiviral agents
Drug screening
Fluorescent indicators
Polarized fluorescence
(fluorescence polarization method for detg. protease activity)
IT Antibodies
Avidins
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(fluorescence polarization method for detg. protease activity)
IT Herpesviridae
Human herpesvirus 1
Human herpesvirus 2
Human herpesvirus 5
Mouse cytomegalovirus
Virus
(protease of; fluorescence polarization method for detg. protease activity)
IT Amino acids, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(substrate contg.; fluorescence polarization method for detg. protease activity)
IT 138039-55-1D, derivs.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(Cascade blue, substrate contg.; fluorescence polarization method for detg. protease activity)
IT 9001-92-7, Protease 139691-88-6, Assemblin 144114-21-6, HIV protease
RL: ANT (Analyte); ANST (Analytical study)
(fluorescence polarization method for detg. protease activity)
IT **375366-95-3P 375366-96-4P**
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(fluorescence polarization method for detg. protease activity)
IT 9013-20-1, Streptavidin
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(fluorescence polarization method for detg. protease activity)
IT 51-17-2D, Benzimidazole, derivs. **56-12-2, 4-Aminobutyric acid**, uses 56-40-6, Glycine, uses

58-85-5, Biotin 60-32-2, 6-Aminocaproic acid 65-61-2D, Acridine orange, derivs. 81-88-9D, derivs. 91-22-5D, Quinoline, derivs. 91-64-5D, Coumarin, derivs. 129-00-0D, Pyrene, derivs. 502-02-3D, derivs. 660-88-8, 5-Aminopentanoic acid 929-17-9, 7-Aminoheptanoic acid 1672-46-4, Digoxigenin 2321-07-5D, Fluorescein, derivs. 4272-77-9D, derivs. 17372-87-1D, Eosin, derivs. 25550-58-7D, Dinitrophenol, derivs. 50402-56-7D, EDANS, derivs. **51306-35-5, DTAF** 82354-19-6D, Texas red, derivs. 138026-71-8D, BODIPY, derivs.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(substrate contg.; fluorescence polarization method for detg. protease activity)

L27 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2002 ACS
AN 1997:258608 HCAPLUS
DN 126:327207
TI Measurement of specific protease activity utilizing fluorescence polarization
AU **Levine, Leanne M.**; Michener, Marshall L.; **Toth, Mihaly V.**; Holwerda, Barry C.
CS Monsanto Corporate Res., St. Louis, MO, 63198, USA
SO Analytical Biochemistry (1997), 247(1), 83-88
CODEN: ANBCA2; ISSN: 0003-2697
PB Academic
DT Journal
LA English
CC 7-1 (Enzymes)
AB A fluorescence polarization assay was designed to measure proteolytic cleavage of a specific peptide substrate for human cytomegalovirus protease. The peptide substrate was derivatized by biotinylation of a **gamma.-aminobutyric acid**-modified amino-terminus and labeled with 5-(4,6-**dichlorotriazinyl**) **aminofluorescein** at the carboxy-terminus. Incubation of this substrate with recombinant human cytomegalovirus protease and subsequent addn. of egg white avidin produced a polarization signal that was proportional to the relative amts. of cleaved and uncleaved substrate. The uncleaved substrate produced a high polarization value upon binding to avidin, whereas the cleaved, low-mol.-wt. fluorescently tagged peptide that cannot bind to avidin produced a low polarization value. The inhibitory activity of a 3,4-dichloroisocoumarin against the protease was evaluated by comparing the change in polarization with a noninhibited control. The fluorescence polarization protease assay does not suffer from interference due to the presence of absorptive interferants making this a convenient, homogeneous assay for high throughput screening.
ST protease assay fluorescence polarization substrate
IT Fluorescent substances
(measurement of specific protease activity utilizing fluorescence polarization)
IT 139691-88-6, Proteinase, assembly protein precursor-processing
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BPR (Biological process); BSU (Biological study, unclassified); ANST (Analytical study); BIOL (Biological study); PROC (Process)
(measurement of specific protease activity utilizing fluorescence polarization)
IT **189753-42-2P**
RL: ARG (Analytical reagent use); BPR (Biological process); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)
(measurement of specific protease activity utilizing fluorescence polarization)
IT 51050-59-0, 3,4-Dichloroisocoumarin
RL: BAC (Biological activity or effector, except adverse); BPR (Biological

process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(measurement of specific protease activity utilizing fluorescence polarization)
IT **58-85-5, Biotin 51306-35-5, DTAF**
189753-43-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(measurement of specific protease activity utilizing fluorescence polarization)

=> fil uspatall
FILE 'USPATFULL' ENTERED AT 14:56:09 ON 06 NOV 2002
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 14:56:09 ON 06 NOV 2002
CA INDEXING COPYRIGHT (C) 2002 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitrn l28

L28 ANSWER 1 OF 1 USPATFULL
AN 2001:218180 USPATFULL
TI Fluorescence polarization method for determining protease activity
IN Levine, Leanna M., Olivette, MO, United States
Toth, Mihaly V., St. Louis, MO, United States
PA G.D. Searle & Co., Chicago, IL, United States, 60680 (U.S. corporation)
PI US 2001046668 A1 20011129
AI US 2001-880654 A1 20010613 (9)
RLI Continuation of Ser. No. US 1999-246787, filed on 8 Feb 1999, ABANDONED
Continuation of Ser. No. US 1997-867258, filed on 2 Jun 1997, ABANDONED
Continuation of Ser. No. US 1994-327170, filed on 21 Oct 1994, ABANDONED
DT Utility
FS APPLICATION
LREP Pharmacia Corporation, Corporate Patent Department, 800 North Lindbergh Blvd., Mail Zone O4E, St. Louis, MO, 63167
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 585
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A fluorescence polarization method of determining protease activity is described.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **375366-95-3P 375366-96-4P**
(fluorescence polarization method for detg. protease activity)

=> d his

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SET COST OFF

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E 'ABU-SER-G;M-ASN-TYR-PRO-ILE-VAL-GLN-LYS'/SQEP
E 'ABU-SER-GLN-ASN-TYR-PRO-ILE-VAL-GLN-LYS'/SQEP

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                E LEVINE L/AU
L5            71 S E3,E7
L6             8 S E21-E25
L7           349 S L3-L6
L8         22923 S L1 OR BIOTIN
L9             2 S L7 AND L8

     FILE 'REGISTRY' ENTERED AT 14:44:59 ON 06 NOV 2002
L10            1 S 51306-35-5

     FILE 'REGISTRY' ENTERED AT 14:45:33 ON 06 NOV 2002

     FILE 'HCAPLUS' ENTERED AT 14:45:56 ON 06 NOV 2002
L11          102 S L10
L12           76 S DTAF
L13           62 S DICHLOROTRIAZIN?(L)(AMINOFLUORESCEIN OR AMINO FLUORESCEIN)
L14            2 S L7 AND L11-L13
L15            2 S L9,L14

     FILE 'REGISTRY' ENTERED AT 14:46:59 ON 06 NOV 2002
L16            1 S 56-12-2

     FILE 'HCAPLUS' ENTERED AT 14:47:47 ON 06 NOV 2002
L17        23862 S L16
L18        14614 S (4 OR GAMMA)()(AMINOBUTANOIC OR AMINOBUTYRIC)()ACID
L19            3 S L7 AND L17,L18
L20            3 S L15,L19
L21          346 S L7 NOT L20
                SEL RN L20

     FILE 'REGISTRY' ENTERED AT 14:49:33 ON 06 NOV 2002
L22           34 S E1-E34
L23            6 S L22 AND PROTEIN/FS
L24            3 S L2 AND 46.492/RID AND 7938.12/RID
L25            0 S 'ABU'GVVNARSLK|'ABU'SQNYPIVQK/SQSP

     FILE 'HCAPLUS' ENTERED AT 14:53:47 ON 06 NOV 2002
L26            2 S L24
L27            2 S L26 AND L3-L9,L11-L15,L17-L21

     FILE 'USPATFULL, USPAT2' ENTERED AT 14:54:23 ON 06 NOV 2002
L28            1 S L24

     FILE 'REGISTRY' ENTERED AT 14:54:43 ON 06 NOV 2002

     FILE 'HCAPLUS' ENTERED AT 14:55:50 ON 06 NOV 2002

     FILE 'USPATFULL, USPAT2' ENTERED AT 14:56:09 ON 06 NOV 2002
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     (FILE 'HOME' ENTERED AT 15:01:17 ON 06 NOV 2002)
               SET COST OFF

     FILE 'REGISTRY' ENTERED AT 15:01:26 ON 06 NOV 2002
L1            21 S C10H16N2O3S/MF AND NCNC2-SC4/ES
L2            13 S L1 AND BIOTIN
L3             8 S L2 NOT (14C# OR 35S OR LABELED OR (D OR T)/ELS)
L4             1 S 51306-35-5

     FILE 'HCAPLUS' ENTERED AT 15:03:37 ON 06 NOV 2002
L5          9527 S L3
L6         28653 S ?BIOTIN?
L7         28990 S L5 OR L6
L8           102 S L4
L9            76 S DTAF
L10          117 S ?DICHLORO?(L)?TRIAZIN?(L)?FLUORESCEIN?
L11           10 S L7 AND L8-L10
L12            8 S L11 NOT (136:2242 OR 126:327207)/DN

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FILE 'HCAPLUS' ENTERED AT 15:06:29 ON 06 NOV 2002
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FILE LAST UPDATED: 5 Nov 2002  (20021105/ED)

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the CAS Roles thesaurus (/RL field) in this file.

=> d l12 all hitstr tot

L12  ANSWER 1 OF 8  HCAPLUS  COPYRIGHT 2002 ACS
AN   2002:72743  HCAPLUS
DN   136:129025
TI   Immunoassay reagents and methods and test kits for the detection and
     quantification of vancomycin in biological fluids
IN   Adamczyk, Maciej; Brate, Elaine M.; Perkowitz, Mary M.; Rege, Sushil D.
PA   USA
SO   U.S. Pat. Appl. Publ., 47 pp., Cont.-in-part of U.S. Ser. No. 26,869,
     abandoned.
     CODEN: USXXCO
DT   Patent
LA   English
```

IC ICM G01N033-53
ICS G01N033-542; G01N033-537; G01N033-543
NCL 435004000
CC 1-1 (Pharmacology)
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002009708	A1	20020124	US 1998-174121	19981016
	WO 2000023806	A1	20000427	WO 1999-US24270	19991015
	W: CA, JP				
	RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1121599	A1	20010808	EP 1999-956580	19991015
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2002528704	T2	20020903	JP 2000-577495	19991015
PRAI	US 1995-416567	B1	19950404		
	US 1998-26869	B2	19980220		
	US 1998-174121	A	19981016		
	WO 1999-US24270	W	19991015		

OS MARPAT 136:129025

AB Immunoassay reagents, methods and test kits for the specific quantification of vancomycin in a test sample are disclosed. The reagent comprises antibodies prepd. with immunogens which is conjugated to a carrier protein and the carboxylic acid terminal of vancomycin by a linking moiety. Also described is the synthesis of labeled reagents where vancomycin is conjugated with preferably fluorescein or fluorescein derivs. via a 0 to 50 carbon linking moiety through the N-methylleucyl amine.

ST immunoassay reagent test kit vancomycin biol fluid; antibody vancomycin immunoassay reagent

IT Immunoglobulins
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); PUR (Purification or recovery); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(G, monoclonal; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Immunoglobulins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(G; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Hybridoma
(HB 11834; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Body fluid
(anal. of; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Structure-activity relationship
(antibody-binding, by vancomycin analogs; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Thyroglobulin
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(conjugates with vancomycin derivs., as immunogens; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Hemocyanins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(conjugates with vancomycin derivs., keyhole limpet, as immunogens; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Chemiluminescent substances
Chromophores
Fluorescent substances
Luminescent substances
Phosphorescent substances
(conjugates with vancomycin derivs.; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Enzymes, uses
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(conjugates, with vancomycin derivs.; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Immunoassay
(fluorescence-polarization; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Immunoglobulins
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(fragments, Fab, of monoclonal IgG to vancomycin; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Biosensors
Immobilization, molecular
Immunoassay
Sample preparation
Test kits
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Antibodies
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Proteins
RL: REM (Removal or disposal); PROC (Process)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Stabilizing agents
(peptides, for vancomycin, antibody specific for vancomycin not competing with; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Calibration
(polypeptide-stabilized vancomycin as stable calibrator for; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Albumins, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(serum, conjugates with vancomycin derivs., bovine, as immunogens; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Dipeptides
Tripeptides
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(stabilizing vancomycin, antibody specific for vancomycin not competing with; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT Peptides, biological studies
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(tetrapeptides, stabilizing vancomycin, antibody specific for vancomycin not competing with; immunoassay reagents and methods and

test kits for detection and quantification of vancomycin in biol. fluids)

IT 98575-51-0, CDP-II
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibody specific for vancomycin having no cress-reactivity with; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 55598-85-1
RL: BSU (Biological study, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(antibody specific for vancomycin having no cress-reactivity with; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 183747-03-7DP, conjugates with thyroglobulin
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)
(as immunogen; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 1404-90-6, Vancomycin
RL: ANT (Analyte); BSU (Biological study, unclassified); RCT (Reactant); ANST (Analytical study); BIOL (Biological study); RACT (Reactant or reagent)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 3301-79-9D, 6-Carboxyfluorescein, conjugates with vancomycin derivs.
21811-74-5D, **Dichlorotriazinylaminofluorescein**, conjugates with vancomycin derivs. 27599-63-9D, Aminofluorescein, conjugates with vancomycin derivs. 76823-03-5D, 5-Carboxyfluorescein, conjugates with vancomycin derivs. 105864-78-6D, conjugates with vancomycin derivs.
265311-68-0 265312-66-1D, conjugates with vancomycin derivs.
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 224826-24-8P 224826-25-9P 224826-26-0P 224826-27-1P 224826-28-2P
224826-29-3P 224826-30-6P 224826-31-7P
RL: ARG (Analytical reagent use); BSU (Biological study, unclassified); SPN (Synthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 1404-90-6D, Vancomycin, conjugates with immunogenic carrier or label
RL: ARG (Analytical reagent use); BUU (Biological use, unclassified); ANST (Analytical study); BIOL (Biological study); USES (Uses)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 635-65-4, Bilirubin, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 55598-74-8, Aglucovancomycin 98510-29-3 101485-50-1, Desvancosaminylvancomycin 113585-94-7
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 320410-19-3
RL: BSU (Biological study, unclassified); PRP (Properties); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 56-12-2, 4-Aminobutyric acid, reactions **58-85-5, Biotin**
6055-52-3 21811-74-5 35013-72-0 92557-81-8 197638-25-8
199293-83-9 211106-69-3, 10-(3-Sulfopropyl)-N-tosyl-N-(3-carboxypropyl)acridinium-9-carboxamide

RL: RCT (Reactant); RACT (Reactant or reagent)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 3251-07-8P, Methyl-4-amino Butyrate 13031-60-2P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 224826-23-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

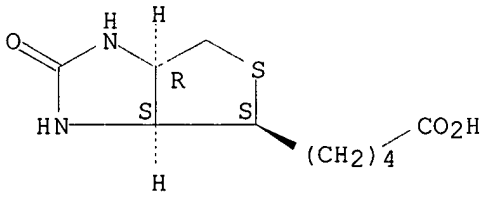
IT 77-86-1, Tris buffer 97-05-2, 5-Sulfosalicylic acid 7758-98-7, Copper sulfate, analysis
RL: ARU (Analytical role, unclassified); ANST (Analytical study)
(pretreatment soln. contg.; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT 224826-22-6P
RL: BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(vancomycin tracers and biosensor prepn. from; immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

IT **58-85-5, Biotin**
RL: RCT (Reactant); RACT (Reactant or reagent)
(immunoassay reagents and methods and test kits for detection and quantification of vancomycin in biol. fluids)

RN 58-85-5 HCAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L12 ANSWER 2 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:537522 HCAPLUS
DN 135:136408
TI Form of dipeptidylpeptidase IV (CD26) found in human serum, antibodies thereto, and uses thereof
IN Duke-Cohan, Jonathan S.; Morimoto, Chikao; Schlossman, Stuart F.
PA Dana-Farber Cancer Institute, Inc., USA
SO U.S., 25 pp., Cont.-in-part of U.S. Ser. No. 457,694.
CODEN: USXXAM
DT Patent
LA English
IC ICM C07K016-00
NCL 530389600
CC 15-2 (Immunochemistry)
Section cross-reference(s): 1, 9
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 6265551	B1	20010724	US 1996-657339	19960603

US 6325989 B1 20011204 US 1995-457694 19950601
CA 2222419 AA 19961205 CA 1996-2222419 19960603
WO 9638550 A1 19961205 WO 1996-US8370 19960603
W: CA, JP
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
JP 2002515724 T2 20020528 JP 1996-536764 19960603
PRAI US 1995-457694 A2 19950601
US 1996-657339 A 19960603
WO 1996-US8370 W 19960603

AB A circulating, sol. form of DPPIV/CD26 isolated from human serum is disclosed. The serum form shares similar enzymic and antigenic properties with the ubiquitous membrane form. However, in several biochem. aspects there are distinct differences. In particular, the circulating serum form has a mol. wt. of 175 kDa (in contrast to the 105 kDa mol. wt. of the membrane form), and it does not bind Adenosine Deaminase Type-1. Nevertheless, the circulating form expresses functional dipeptidylpeptidase IV activity and retains the ability to costimulate the T lymphocyte response to recall antigen. Circulating DPPIV has been detd. to be the sol. form of a 175 kDa DPPIV CD26-related mol. rapidly expressed on the surface of activated T cells, prior to the expression of 105 kDa CD26. Although 105 kDa membrane type CD26 may be found in the serum in small amts., the majority of serum DPPIV activity is provided by a novel peptidase structurally distinct from 105 kDa CD26/DPPIV. Polyclonal and monoclonal antibodies capable of distinguishing the 175 kDa form from the 105 kDa form are also disclosed. As an immunostimulant, 175 kDa DPPIV may be used in the treatment of numerous diseases, such as AIDS, systemic lupus erythematosus, rheumatoid arthritis, and other autoimmune diseases, or as an adjuvant in a vaccine.

ST dipeptidylpeptidase IV soluble antibody immunoassay immunotherapy

IT Blood serum
Test kits
(175-kDa dipeptidylpeptidase IV (DPPIV) found in human serum, detection of DPPIV using antibodies, and use of DPPIV in treatment of diseases)

IT Antibodies
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(175-kDa dipeptidylpeptidase IV (DPPIV) found in human serum, detection of DPPIV using antibodies, and use of DPPIV in treatment of diseases)

IT Immunostimulants
(175-kDa dipeptidylpeptidase IV stimulates T cell activation)

IT Proteins, specific or class
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(A, immunoassay; detection of 175-kDa dipeptidylpeptidase IV by)

IT Hybridoma
(B-cell; 175-kDa dipeptidylpeptidase IV (DPPIV) found in human serum, detection of DPPIV using antibodies, and use of DPPIV in treatment of diseases)

IT T cell (lymphocyte)
(activation; 175-kDa dipeptidylpeptidase IV stimulates T cell activation)

IT Immunostimulants
(adjuvants; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)

IT Immunoassay
(agglutination test; detection of 175-kDa dipeptidylpeptidase IV by)

IT Mouse
Rabbit
(anti-DPPIV antibodies produced in)

IT Immunoassay
(complement fixation; detection of 175-kDa dipeptidylpeptidase IV by)

IT Immunoassay
(enzyme-linked immunosorbent assay; detection of 175-kDa

dipeptidylpeptidase IV by)
IT Immunoassay
(fluorescence; detection of 175-kDa dipeptidylpeptidase IV by)
IT Transplant and Transplantation
(graft-vs.-host reaction; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)
IT Immunoassay
(immunodiffusion; detection of 175-kDa dipeptidylpeptidase IV by)
IT Immunoassay
(immunoelectrophoresis; detection of 175-kDa dipeptidylpeptidase IV by)
IT Immunoassay
(immunoradiometric assay; detection of 175-kDa dipeptidylpeptidase IV by)
IT Drug delivery systems
(injections, i.m.; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)
IT Drug delivery systems
(injections, i.p.; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)
IT Drug delivery systems
(injections, i.v.; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)
IT Drug delivery systems
(injections, s.c.; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)
IT Antibodies
RL: ARG (Analytical reagent use); BPN (Biosynthetic preparation); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal; 175-kDa dipeptidylpeptidase IV (DPPIV) found in human serum, detection of DPPIV using antibodies, and use of DPPIV in treatment of diseases)
IT Fluorescent substances
Ions
Luminescent substances
Radioactive substances
(on antibody for detection of 175-kDa dipeptidylpeptidase IV)
IT Avidins
Enzymes, uses
Phycoerythrins
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(on antibody for detection of 175-kDa dipeptidylpeptidase IV)
IT Drug delivery systems
(oral; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)
IT Immunoassay
(precipitin; detection of 175-kDa dipeptidylpeptidase IV by)
IT Immunoassay
(radioimmunoassay; detection of 175-kDa dipeptidylpeptidase IV by)
IT Immunoassay
(sandwich; detection of 175-kDa dipeptidylpeptidase IV by)
IT Lupus erythematosus
(systemic; use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)
IT AIDS (disease)
Autoimmune disease
Immunotherapy
Multiple sclerosis
Rheumatoid arthritis
Vaccines
(use of 175-kDa dipeptidylpeptidase IV as an adjuvant in vaccines and in therapeutic compns. for treatment of diseases)

IT 54249-88-6DP, dipeptidylpeptidase IV, analogs 54249-88-6P, dipeptidylpeptidase IV
RL: ANT (Analyte); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); ANST (Analytical study); BIOL (Biological study); PREP (Preparation); USES (Uses)
(175-kDa dipeptidylpeptidase IV (DPPIV) found in human serum, detection of DPPIV using antibodies, and use of DPPIV in treatment of diseases)

IT 9003-99-0, Peroxidase
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(horseradish; on antibody for detection of 175-kDa dipeptidylpeptidase IV)

IT **58-85-5, Biotin** 93-35-6, Umbelliferone 521-31-3, Luminol 605-65-2, Dansyl chloride 2321-07-5, Fluorescein 9000-81-1, Acetylcholine esterase 9001-78-9, Alkaline phosphatase 10028-17-8, Tritium, uses 10043-66-0, iodine-131, uses 13558-31-1 14158-31-7, iodine-125, uses 15117-53-0, sulfur-35, uses 21811-74-5, **Dichlorotriazinylaminofluorescein** 27072-45-3, Fluorescein isothiocyanate
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(on antibody for detection of 175-kDa dipeptidylpeptidase IV)

IT 352017-85-7
RL: PRP (Properties)
(unclaimed protein sequence; form of dipeptidylpeptidase IV (CD26) found in human serum, antibodies thereto, and uses thereof)

IT 351902-71-1 351902-72-2 351902-73-3 351902-74-4 351902-75-5 351902-76-6 351902-77-7 351902-78-8 351902-79-9 351902-80-2 351902-81-3
RL: PRP (Properties)
(unclaimed sequence; form of dipeptidylpeptidase IV (CD26) found in human serum, antibodies thereto, and uses thereof)

RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD

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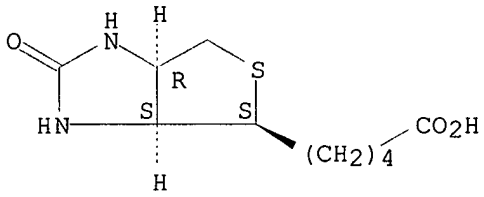
IT **58-85-5, Biotin**
RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses)
(on antibody for detection of 175-kDa dipeptidylpeptidase IV)
RN 58-85-5 HCAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L12 ANSWER 3 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 2001:338673 HCAPLUS
DN 134:350284
TI Methods to screen microorganisms or gene libraries for products secreted from a cell
IN Moeller, Soeren; Kongsbak, Lars; Kristensen, Hans-Henrik; Vind, Jesper; Pedersen, Henrik; Husum, Tommy Lykke
PA Novozymes A/S, Den.
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C12N
CC 9-16 (Biochemical Methods)
Section cross-reference(s): 3, 10
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001032829	A2	20010510	WO 2000-DK566	20001010
	WO 2001032829	A3	20011213		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	AU 2000076460	A5	20010514	AU 2000-76460	20001010

PRAI DK 1999-1602 A 19991105
WO 2000-DK566 W 20001010

AB The invention describes methods for screening for products secreted from the cells, and provides methods to establish a correlation between the activity of the secreted product and the secreting cell. Accordingly in a first aspect the present invention relates to a method for screening a DNA library for DNA of interest comprising the steps of (a) creating host cells comprising the DNA library, (b) generating samples each comprising a host cell of step (a), (c) establishing a means for correlating of interest in a sample of the sample, (d) detg. which intensity interval of fluorescence indicates secretion in the sample when the correlating means of step (c) is used, (e) cultivating the samples under suitable conditions, and (f) selecting the samples exhibiting fluorescence within the intensity interval of step (d) using a fluorescence analyzer; wherein the host cell comprises DNA of interest.

ST screen microorganism gene library product secretion cell

IT Fluorescent dyes
(Bifunctional; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Fluorometry
(Fluorescence Activated Cell Sorter; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Resonant energy transfer
(Fluorescence; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Avidins
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(Fluorescently labeled; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Animal
Plant (Embryophyta)
(Transgenic; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Gene
(expression; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Apparatus
(fluorescence activated cell sorter; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Erythrocyte
Macrophage
(ghost; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Animal tissue culture
Antimicrobial agents
Aspergillus
Aspergillus nidulans
Aspergillus niger
Aspergillus oryzae
Bacillus (bacterium genus)
Bacillus clausii
Bacillus licheniformis
Bacillus subtilis
Bacteria (Eubacteria)
Carbon sources, microbial
Cell
Culture media
DNA sequences
Diffusion
Drugs
Encapsulation
Escherichia

Escherichia coli
Evolution
Films
Fluorescence
Fluorescent substances
Fluorometers
Fungi
Genomic library
Liposomes
Microorganism
Microspheres
Nucleic acid library
Samples
Secretion (process)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT DNA
Enzymes, biological studies
Gene
Hemoglobins
Lipids, biological studies
Transgene
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Antibodies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Carbohydrates, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Caseins, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Peptides, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Polysaccharides, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Proteins, general, biological studies
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Environment
(microenvironment; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT Genetic vectors
(recombinant; methods to screen microorganisms or gene libraries for products secreted from a cell)

IT 9001-62-1, Lipase 9001-92-7, Protease 9003-99-0, Peroxidase
9013-05-2, Phosphatase 9013-79-0, Esterase 9031-11-2, Lactase

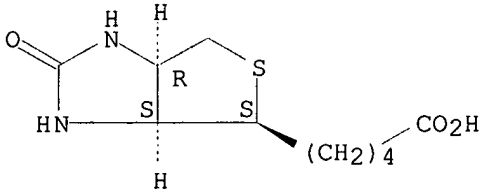
9031-44-1, Kinase 9031-48-5, Glucosyltransferase 9031-66-7, Transaminase 9033-06-1, Glucosidase 9038-14-6, Monooxygenase 37292-90-3, Dioxygenase 37341-58-5, Phytase 80498-15-3, Laccase 93229-67-5, Haloperoxidase 131384-64-0, Rhamnogalacturonase
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

IT **58-85-5, Biotin** 81-88-9 2321-07-5, Fluorescein 9000-07-1, Carrageenan 9000-69-5, Pectin 9000-92-4, Amylase 9003-05-8, Polyacrylamide 9004-34-6, Cellulose, biological studies 9004-54-0, Dextran, biological studies 9005-25-8, Starch, biological studies 9005-32-7, Alginic acid 9012-36-6, Agarose 9012-76-4, Chitosan 9013-20-1D, Streptavidin., Fluorescently labeled **51306-35-5**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

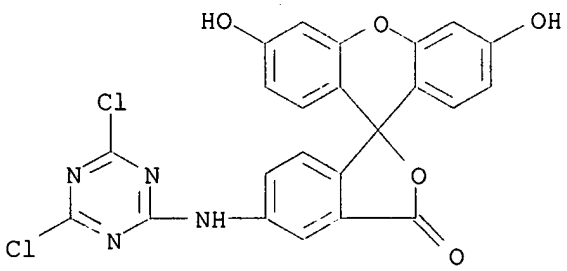
IT **58-85-5, Biotin 51306-35-5**
RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)
(methods to screen microorganisms or gene libraries for products secreted from a cell)

RN 58-85-5 HCAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 51306-35-5 HCAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 5-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-3',6'-dihydroxy- (9CI) (CA INDEX NAME)

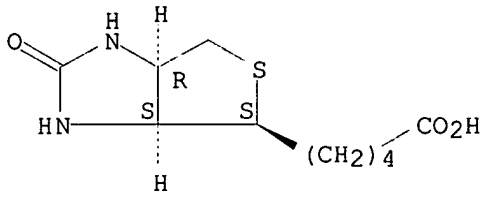


L12 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1997:343121 HCAPLUS
DN 127:78169
TI Synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins
AU Stearns, Nancy A.; Prigent-Richard, Sandrine; Letourneur, Didier; Castellot, John J., Jr.
CS Tufts Univ. School Medicine, Boston, MA, 02111, USA

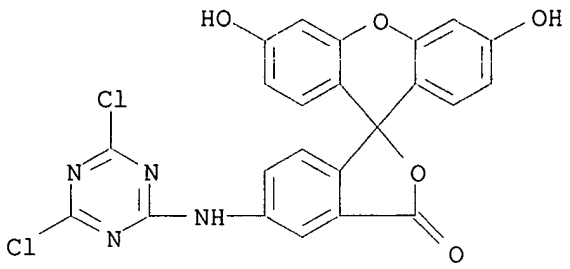
SO Analytical Biochemistry (1997), 247(2), 348-356
CODEN: ANBCA2; ISSN: 0003-2697
PB Academic
DT Journal
LA English
CC 9-16 (Biochemical Methods)
AB Three labeled heparin species were synthesized as probes for heparin-binding protein detection. Heparin conjugated with 5([4,6-**dichlorotriazin**-2-yl]amino)**fluorescein** can be iodinated to a high specific activity. This probe specifically detected 40 pg histone on a dot blot without affinity purifn. Heparin **biotinylated** on its naturally occurring primary amino groups also detected known heparin-binding proteins in a specific manner. This probe detected lower amts. of collagen I and basic fibroblast growth factor on nitrocellulose membranes than did the iodinated probe, with comparable detection times. To create more attachment sites for **biotin**, we covalently attached amino groups to the hydroxyl groups of heparin using 3-bromopropylamine hydrobromide. After **biotinylation**, the amino-rich probe detected heparin-binding proteins at the same or higher sensitivity as the **biotinylated** native heparin probe, using 100-fold less probe and much shorter detection times. This method of labeling is generally applicable to other polysaccharides, and would be useful when the amt. of ligand is limited. We show that these three probes detect essentially the same spectrum of proteins in detergent ext. of smooth muscle cell plasma membrane, and expect them to be useful probes for detection of cell-surface heparin receptors.
ST heparin binding protein detection probe synthesis
IT Proteins, specific or class
RL: ANT (Analyte); ANST (Analytical study)
(heparin-binding; synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)
IT Cell membrane
Muscle
(synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)
IT Histones
RL: ANT (Analyte); ANST (Analytical study)
(synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)
IT Collagens, analysis
RL: ANT (Analyte); ANST (Analytical study)
(type I; synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)
IT 62031-54-3, Fibroblast growth factor
RL: ANT (Analyte); ANST (Analytical study)
(synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)
IT 9005-49-6DP, Heparin, deriv., preparation 191671-47-3DP, heparin derivs
RL: ARG (Analytical reagent use); SPN (Synthetic preparation); ANST (Analytical study); PREP (Preparation); USES (Uses)
(synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)
IT **58-85-5, Biotin,** 5003-71-4, 3-Bromopropylamine hydrobromide **51306-35-5,** 5([4,6-**Dichlorotriazin**-2-yl]amino)**fluorescein** 191671-46-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)
IT **58-85-5, Biotin, 51306-35-5,** 5([4,6-**Dichlorotriazin**-2-yl]amino)**fluorescein**
RL: RCT (Reactant); RACT (Reactant or reagent)
(synthesis and characterization of highly sensitive heparin probes for detection of heparin-binding proteins)

RN 58-85-5 HCAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 51306-35-5 HCAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 5-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-3',6'-dihydroxy- (9CI) (CA INDEX NAME)



L12 ANSWER 5 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1996:525942 HCAPLUS
DN 125:322157
TI Evaluation of five green fluorescence-emitting streptavidin-conjugated fluorochromes for use in immunofluorescence microscopy
AU Benchaib, Mehdi; Delorme, Richard; Pluvinage, Muriel; Bryon, Paul Andre; Souchier, Catherine
CS Analytical Cytology Lab., Claude Bernard Univ., Lyon, F-69373, Fr.
SO Histochemistry and Cell Biology (1996), 106(2), 253-256
CODEN: HCBIFP
PB Springer
DT Journal
LA English
CC 9-10 (Biochemical Methods)
Section cross-reference(s): 15
AB **Fluorescein** isothiocyanate (FITC) is largely used in immunofluorescence methods. We propose to analyze the quality of some recent fluorochromes using image anal. Fluorochromes tested include FITC and **dichlorotriazinylaminofluorescein (DTAF)**, dipyrromethene boron difluoride (BODIPY), Rhodol Green, and cyanine 2. RAMOS cells were immunolabeled against the proliferating cell nuclear antigen (PCNA) revealed by the **biotin**-streptavidin technique. Slides were mounted in anhyd. glycerol or in buffered glycerol (pH 7.0 or pH 8.5). No antifading medium was added. Cell fluorescence emission intensity and bleaching characteristics were measured. Rhodol Green exhibited the highest fluorescence intensity and the best photobleaching resistance. Although BODIPY also resisted well during the photobleaching assay, its fluorescence intensity was weak. FITC, **DTAF** and cyanine 2 showed intermediate fluorescence intensity and a fast decay of fluorescence. Among the green-emitting fluorochromes tested, Rhodol Green appeared to be the best.

ST immunofluorescence microscopy green fluorescence emitting fluorochrome
IT Dyes
RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)
(cyanine 2, streptavidin conjugates; green fluorescence-emitting fluorochromes for immunofluorescence microscopy)
IT Fluorescence
(green fluorescence-emitting fluorochromes for immunofluorescence microscopy)
IT Deoxyribonucleic acid formation factors
RL: ANT (Analyte); ANST (Analytical study)
(cyclins, green fluorescence-emitting fluorochromes for immunofluorescence microscopy)
IT Dyes
(fluorescent, streptavidin conjugates; green fluorescence-emitting fluorochromes for immunofluorescence microscopy)
IT Immunoassay
(immunofluorescence microscopy, green fluorescence-emitting fluorochromes for immunofluorescence microscopy)
IT 9013-20-1D, Streptavidin, fluorochrome conjugates 21811-74-5D, **Dichlorotriazinylaminofluorescein**, streptavidin conjugates 27072-45-3D, FITC, streptavidin conjugates 138026-71-8D, Dipyrromethene boron difluoride, streptavidin conjugates 183185-51-5D, Rhodol Green, streptavidin conjugates
RL: ARG (Analytical reagent use); PRP (Properties); ANST (Analytical study); USES (Uses)
(green fluorescence-emitting fluorochromes for immunofluorescence microscopy)

L12 ANSWER 6 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1995:982407 HCAPLUS
DN 124:15482
TI Bioactive and/or targeted dendrimer conjugates
IN Tomalia, Donald A.; Baker, James R.; Bielinska, Anna U.; Brothers, Herbert M., II; Cheng, Roberta C.; Fazio, Michael J.; Hedstrand, David M.; Johnson, Jennifer A.; Kaplan, Donald A.; et al.
PA Dow Chemical Co., USA; Dendritech Inc.; Regents of the University of Michigan
SO PCT Int. Appl., 252 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM A61K047-48
ICS C12N015-87
CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 5, 35
FAN.CNT 9

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9524221	A1	19950914	WO 1995-US3045	19950307
	W: AU, BR, CA, CN, CZ, EE, FI, GE, HU, JP, KR, LT, LV, MX, NO, NZ, PL, PT, RU, SI, SK, UA, US, US, US, US, US, US, US				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	BR 8707431	A	19881101	BR 1987-7431	19870419
	AT 89743	E	19930615	AT 1987-307266	19870817
	JP 63501878	T2	19880728	JP 1987-505282	19870818
	JP 07002840	B4	19950118		
	JP 63502350	T2	19880908	JP 1987-505084	19870818
	JP 07057735	B4	19950621		
	BR 8707433	A	19881101	BR 1987-7433	19870818
	FI 8801768	A	19880415	FI 1988-1768	19880415
	US 5338532	A	19940816	US 1991-654851	19910213
	US 5527524	A	19960618	US 1993-43198	19930405

	CA 2161684	AA	19950914	CA 1995-2161684	19950307
	AU 9521181	A1	19950925	AU 1995-21181	19950307
	EP 699079	A1	19960306	EP 1995-914006	19950307
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
	ZA 9501877	A	19960909	ZA 1995-1877	19950307
	JP 08510761	T2	19961112	JP 1995-523673	19950307
	RU 2127125	C1	19990310	RU 1995-122714	19950307
	IL 128773	A1	20010520	IL 1995-128773	19950307
	IL 128774	A1	20010520	IL 1995-128774	19950307
	IL 128775	A1	20010520	IL 1995-128775	19950307
	PL 181064	B1	20010531	PL 1995-311633	19950307
	PL 182237	B1	20011130	PL 1995-335982	19950307
	FI 9505320	A	19951124	FI 1995-5320	19951106
	NO 9504434	A	19960105	NO 1995-4434	19951106
	FI 9801807	A	19980824	FI 1998-1807	19980824
PRAI	US 1986-897455	A2	19860818		
	US 1987-87266	A2	19870818		
	US 1989-386049	A2	19890726		
	US 1991-654851	A2	19910213		
	US 1993-43198	A2	19930405		
	US 1994-207494	A2	19940307		
	US 1994-316536	A2	19940930		
	EP 1987-307266	A	19870817		
	WO 1987-US2075	W	19870818		
	WO 1987-US2076	A	19870818		
	IL 1995-112920	A3	19950307		
	WO 1995-US3045	W	19950307		

AB Dendritic polymer conjugates which are composed of at least one dendrimer in assocn. with at least one unit of a carried material, where the carrier material can be a biol. response modifier, have been prepd. The conjugate can also have a target director present, and when it is present, then the carried material may be a bioactive agent. Preferred dendritic polymers are dense star polymers, which have been complexed with biol. response modifiers. These conjugates and complexes have particularly advantageous properties due to their unique characteristics.

ST dendrimer polymer conjugate bioactive

IT Virus
(bioactive and/or targeted dendrimer conjugates)

IT Dendritic polymers
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(bioactive and/or targeted dendrimer conjugates)

IT Deoxyribonucleic acids
Gene, animal
Interferons
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioactive and/or targeted dendrimer conjugates)

IT Immunoglobulins
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(G, conjugates, with Starburst polyamidoamine; bioactive and/or targeted dendrimer conjugates)

IT Therapeutics
(geno-, bioactive and/or targeted dendrimer conjugates)

IT Lymphokines and Cytokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(interleukins, bioactive and/or targeted dendrimer conjugates)

IT Antibodies
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(monoclonal, conjugates, with Starburst polyamidoamine; bioactive and/or targeted dendrimer conjugates)

IT Polyamines

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyamide-, bioactive and/or targeted dendrimer conjugates)

IT Polyamides, biological studies
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(polyamine-, bioactive and/or targeted dendrimer conjugates)

IT Lymphokines and Cytokines
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(tumor necrosis factor, bioactive and/or targeted dendrimer conjugates)

IT 79-08-3D, Bromoacetic acid, reaction products starburst dendrimers 96-33-3 107-15-3, 1,2-Ethanediamine, reactions 930-41-6, Mesyl aziridine 3229-00-3, Pentaerythrityl tetrabromide 72252-47-2, 4-Hydroxymethyl-2,6,7-trioxabicyclo[2.2.2]octane 119822-21-8 119822-24-1 131934-31-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(bioactive and/or targeted dendrimer conjugates)

IT 119822-25-2P 119822-27-4P 119822-34-3P 119822-35-4P 150749-67-0P 171409-42-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(bioactive and/or targeted dendrimer conjugates)

IT 119822-22-9P 119822-28-5P 119822-31-0P 119822-33-2P 171409-38-4P 171409-39-5P
RL: RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(bioactive and/or targeted dendrimer conjugates)

IT 50-78-2DP, Aspirin, reaction products with Starburst polyamidoamine **58-85-5DP, Biotin**, reaction products with Starburst polyamidoamine 67-43-6DP, Dtpa, reaction products with Starburst polyamidoamine 69-72-7DP, reaction products with Starburst polyamidoamine 79-10-7DP, 2-Propenoic acid, reaction products with Starburst polyamidoamine 90-82-4DP, Pseudoephedrine, reaction products with Starburst polyamidoamine 94-75-7DP, 2,4-D, reaction products with Starburst polyamidoamine 107-15-3DP, 1,2-Ethanediamine, reaction products with Starburst polyamidoamine 113-24-6DP, Sodium pyruvate, reaction products with Starburst polyamidoamine 118-48-9DP, Isatoic anhydride, reaction products with Starburst polyamidoamine 137-40-6DP, Sodium propionate, reaction products with Starburst polyamidoamine 301-04-2DP, Lead acetate, complexes with Starburst polyamidoamine 350-46-9DP, 4-Fluoronitrobenzene, reaction products with Starburst polyethylenimine 463-71-8DP, Carbonothioic dichloride, reaction products starburst dendrimers 605-65-2DP, Dansyl chloride, reaction products with Starburst polyamidoamine 2321-07-5DP, reaction products with Starburst polyamidoamine 2984-50-1DP, 1,2-Epoxyoctane, reaction products with Starburst polyamidoamine 7390-81-0DP, reaction products with Starburst polyamidoamine 7439-89-6DP, Iron, complexes with Starburst polyamidoamine 7439-96-5DP, Manganese, complexes with Starburst polyamidoamine 7440-02-0DP, Nickel, complexes with Starburst polyamidoamine 7440-05-3DP, Palladium, complexes with Starburst polyamidoamine 7440-16-6DP, Rhodium, complexes with Starburst polyamidoamine 7440-54-2DP, Gadolinium, complexes with Starburst polyamidoamine 7440-65-5DP, Yttrium, complexes with Starburst polyamidoamine 7665-72-7DP, tert-Butyl glycidyl ether, reaction products with Starburst polyamidoamine 7705-08-0DP, Ferric chloride, complexes with Starburst polyamidoamine 7773-01-5DP, Manganese chloride, complexes with Starburst polyamidoamine 9003-99-0DP, Peroxidase, reaction products with Starburst polyamidoamine 9004-10-8DP, Insulin, reaction products with Starburst polyamidoamine 10098-91-6DP, Yttrium 90, complexes with Starburst polyamidoamine, biological studies 21293-29-8DP, Abscisic acid, reaction products with Starburst polyamidoamine 22663-09-8DP, Methyl 10,11-epoxyundecanoate, reaction products with Starburst

polyamidoamine 23911-26-4DP, DTPA anhydride, reaction products with Starburst polyamidoamine 30953-20-9DP, Bradykinin potentiator C, reaction products with Starburst polyamidoamine **51306-35-5DP**, reaction products with Starburst polyamidoamine 51908-46-4DP, N-Dansylaziridine, reaction products with Starburst polyamidoamine 66556-73-8DP, reaction products with Starburst polyamidoamine 76823-03-5DP, 5-Carboxyfluorescein, reaction products with Starburst polyamidoamine 106754-95-4DP, 4'-Aminomethylfluorescein, reaction products with Starburst polyamidoamine 115234-09-8DP, reaction products with Starburst polyamidoamine 119822-32-1P 130707-76-5DP, reaction products with Starburst polyamidoamine 171409-40-8DP, reaction products with ethylenediamine and Me acrylate 171409-40-8P 171409-41-9P
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(bioactive and/or targeted dendrimer conjugates)

IT 143011-72-7, Granulocyte colony stimulating factor
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(bioactive and/or targeted dendrimer conjugates)

IT 9014-00-0, Luciferase
RL: BPR (Biological process); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(dendrimer-mediated transfection of; bioactive and/or targeted dendrimer conjugates)

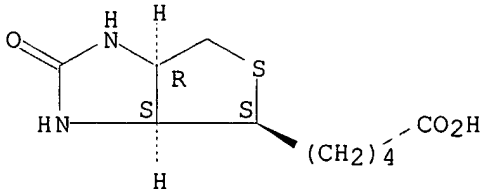
IT 5989-27-5P, (+)-Limonene
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(encapsulation by Starburst polyamidoamine; bioactive and/or targeted dendrimer conjugates)

IT 9004-54-0P, Dextran, biological studies
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(transfection of dendrimers and; bioactive and/or targeted dendrimer conjugates)

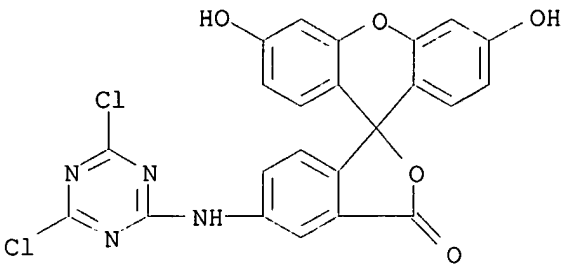
IT **58-85-5DP**, **Biotin**, reaction products with Starburst polyamidoamine **51306-35-5DP**, reaction products with Starburst polyamidoamine
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(bioactive and/or targeted dendrimer conjugates)

RN 58-85-5 HCAPLUS
CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 51306-35-5 HCAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 5-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]-3',6'-dihydroxy- (9CI) (CA INDEX NAME)



L12 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2002 ACS
AN 1994:404522 HCAPLUS
DN 121:4522
TI Bridge immunoassay
IN LaMotte, George B., III
PA Ciba Corning Diagnostics Corp., USA
SO U.S., 24 pp. Cont. of U.S. Ser. No. 653,024, abandoned.
CODEN: USXXAM
DT Patent
LA English
IC ICM G01N033-569
ICS G01N033-543; G01N033-53; G01N033-536
NCL 435005000
CC 9-10 (Biochemical Methods)
Section cross-reference(s): 15
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 5296347	A	19940322	US 1993-14092	19930204
PRAI US 1991-653024		19910208		

AB Disclosed is a bridge immunoassay, which employs a primary free soln. analyte/receptor binding reaction, for example, in a sandwich-type format (two or more analyte receptors), in a competitive format (single analyte receptor), or in a related immunoassay format, and a universal solid phase and capture system. The universal capture system comprises a first receptor bound to a solid phase and a bridge receptor (a second receptor) which functions both as a ligand for the bound first receptor and as a receptor for a ligand conjugated to a sample analyte receptor (a third receptor). The bridge receptor is used to immobilize the immunocomplexes formed free in soln. by linking them to the bound first receptor. The universal capture system can be used for assays for any analyte as the bridge receptor binds to a ligand, for example, a hapten or binding protein, conjugated to the sample analyte receptor. Methods, compns. and test kits for such bridge immunoassays are provided. A sandwich EIA for serum c-erbB-2 protein is described which uses both mouse anti-c-erbB-2 monoclonal antibodies conjugated to either the hapten FITC or to horseradish peroxidase, c-erbB-2 calibrators and controls, a **biotinylated** mouse monoclonal antibody to FITC as the bridge receptor, and polystyrene tubes coated with streptavidin.

ST bridge immunoassay; sandwich bridge EIA serum cerbB2 protein
IT Animal tissue
Blood analysis
Urine analysis
(analyte detn. in, by bridge immunoassay)
IT Immunoassay
(bridge, universal solid phase and capture system in)
IT Pharmaceutical analysis
(by bridge immunoassay)
IT Dyes
(conjugates with anti-analyte antibody, in bridge immunoassay using

universal solid phase and capture system)
IT Radical ions
(conjugates, with anti-analyte antibody, in bridge immunoassay using universal solid phase and capture system)
IT Bacteria
Virus
(detn. of, by bridge immunoassay)
IT Allergens
Antibodies
Antigens
Keratins
Thyroid hormones
Toxins
Vitamins
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by bridge immunoassay)
IT Steroids, analysis
RL: ANST (Analytical study)
(hormone, detn. of, by bridge immunoassay)
IT Receptors
RL: ANST (Analytical study)
(immobilized, in bridge immunoassay using universal solid phase and capture system)
IT Environmental pollution
(industrial, detn. of, by bridge immunoassay)
IT Enzymes
RL: ANST (Analytical study)
(substrates, conjugates with anti-analyte antibody, in bridge immunoassay using universal solid phase and capture system)
IT Antigens
RL: ANT (Analyte); ANST (Analytical study)
(CEA (carcinoembryonic antigen), detn. of, by bridge immunoassay)
IT Immunoassay
(bioluminescence, bridge, universal solid phase and capture system in)
IT Immunoassay
(chemiluminescence, bridge, universal solid phase and capture system in)
IT Polysaccharides, uses
RL: USES (Uses)
(conjugates, antigenic, with anti-analyte antibody, in bridge immunoassay using universal solid phase and capture system)
IT Haptens
RL: ANST (Analytical study)
(conjugates, with anti-analyte antibody, in bridge immunoassay using universal solid phase and capture system)
IT Immunoassay
(enzyme, bridge, universal solid phase and capture system in)
IT Receptors
RL: ANT (Analyte); ANST (Analytical study)
(epidermal growth factor/.alpha.-transforming growth factor, gene c-erbB, detn. of, by bridge immunoassay)
IT Immunoassay
(fluorescence, bridge, universal solid phase and capture system in)
IT Virus, animal
(human immunodeficiency, antibodies to, detn. of, by bridge immunoassay)
IT Avidins
RL: ANST (Analytical study)
(immobilized, in bridge immunoassay using universal solid phase and capture system)
IT Antibodies
RL: ANST (Analytical study)
(monoclonal, to hapten conjugated to anti-analyte antibody, as bridge

receptor, in bridge immunoassay using universal solid phase and capture system)

IT Receptors
RL: ANT (Analyte); ANST (Analytical study)
(p185c-erbB2, detn. of, by bridge immunoassay)

IT Immunoassay
(radioimmunoassay, bridge, universal solid phase and capture system in)

IT Fetoproteins
RL: ANT (Analyte); ANST (Analytical study)
(.alpha.-, detn. of, by bridge immunoassay)

IT Animal growth regulator receptors
RL: ANT (Analyte); ANST (Analytical study)
(.alpha.-transforming growth factor gene c-erbB, detn. of, by bridge immunoassay)

IT **58-85-5D, Biotin**, anti-hapten antibody conjugates
RL: ANST (Analytical study)
(as bridge receptor in bridge immunoassay using universal solid phase and capture system)

IT 9002-61-3, Chorionic gonadotropin
RL: ANST (Analytical study)
(detn. of human, by bridge immunoassay)

IT 51-48-9, Thyroxine, analysis 9002-71-5, Thyroid-stimulating hormone 9025-26-7, Cathepsin D
RL: ANT (Analyte); ANST (Analytical study)
(detn. of, by bridge immunoassay)

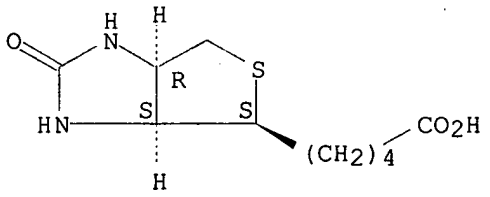
IT 70-34-8D, 2,4-Dinitrofluorobenzene, anti-analyte antibody conjugates 260-94-6D, Acridine, derivs., anti-analyte antibody conjugates 605-65-2D, Dansyl chloride, anti-analyte antibody conjugates 2321-07-5D, Fluorescein, derivs., anti-analyte antibody conjugates 9001-78-9D, Alkaline phosphatase, conjugates with anti-analyte antibody 9002-13-5D, Urease, conjugates with anti-analyte antibody 9003-99-0D, Peroxidase, conjugates with anti-analyte antibody 9013-20-1D, Streptavidin, immobilized 13558-31-1D, Rhodamine, derivs., anti-analyte antibody conjugates 21811-74-5D, **Dichlorotriazinyl aminofluorescein**, anti-analyte antibody conjugates 25154-54-5D, Dinitrobenzene, anti-analyte antibody conjugates 25168-10-9D, Naphthylamine, derivs., anti-analyte antibody conjugates 27072-45-3D, Fluorescein isothiocyanate, anti-analyte antibody conjugates 63368-54-7D, anti-analyte antibody conjugates 107347-53-5D, Tetramethyl rhodamine isothiocyanate, anti-analyte antibody conjugates
RL: ANST (Analytical study)
(in bridge immunoassay using universal solid phase and capture system)

IT **58-85-5D, Biotin**, anti-hapten antibody conjugates
RL: ANST (Analytical study)
(as bridge receptor in bridge immunoassay using universal solid phase and capture system)

RN 58-85-5 HCAPLUS

CN 1H-Thieno[3,4-d]imidazole-4-pentanoic acid, hexahydro-2-oxo-, (3aS,4S,6aR)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



L12 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2002 ACS

AN 1989:229134 HCAPLUS
DN 110:229134
TI Association of glyceraldehyde-3-phosphate dehydrogenase with the plasma membrane of the intact human red blood cell
AU Rogalski, Adrienne A.; Steck, Theodore L.; Waseem, Ahmad
CS Dep. Anat. Cell Biol., Univ. Illinois, Chicago, IL, 60612, USA
SO Journal of Biological Chemistry (1989), 264(11), 6438-46
CODEN: JBCHA3; ISSN: 0021-9258
DT Journal
LA English
CC 13-5 (Mammalian Biochemistry)
AB The distribution of glyceraldehyde 3-phosphate dehydrogenase (G3PD) in the intact human erythrocyte was examd. using indirect immunmofluorescence and affinity-purified rabbit antibodies to G3PD. Antibody specificity was demonstrated by immunoblotting as well as immunofluorescence expts. with ghosts specifically depleted of and reconstituted with G3PD. Anti-G3PD immunolabeling expts. utilized both fixed whole cells and fixed cell suspensions infused with 2.3M sucrose, frozen, and thick-sectioned. In all expts., a 2-step fixation protocol was employed which ensured that cytoplasmic Hb was retained when cells were subjected to Triton X 100 permeabilization, the antigenicity of G3PD was preserved, and antibody penetration was complete. Mixts. of **biotinylated** affinity-purified antibodies to G3PD and **dichlorotriazinylaminofluore scein**-labeled, affinity-purified antibodies to Hb were used, followed by rhodamine-streptavidin, in double-label expts. In both whole and sectioned human erythrocytes, G3PD staining was predominantly membrane-assocd., whereas Hb staining was diffusely distributed throughout the cytoplasm. In isolated ghosts, some G3PD was tightly bound to the membrane and was resistant to elution with phosphate-buffered saline and NAD/arsenate. However, in immunolabeled rat reticulocytes and erythrocytes, G3PD was cytoplasmic. Nucleated human blood cells and platelets also exhibited cytoplasmic G3PD. In .apprx.10% of the human erythrocyte population, G3PD was also cytoplasmic. These cells were flatter in shape and exhibited strong cytoplasmic immunolabeling for Hb which was sometimes concd. along the cell membrane; possibly, these cells were late reticulocytes or early erythrocytes. In conclusion, G3PD is preferentially assocd. with the plasma membrane of human erythrocytes in a specific fashion.
ST glyceraldehyde phosphate dehydrogenase erythrocyte membrane
IT Erythrocyte
(glyceraldehyde phosphate dehydrogenase of cell membrane of, of human)
IT Blood platelet
(glyceraldehyde phosphate dehydrogenase of cytoplasm of, of human)
IT Reticulocyte
(glyceraldehyde phosphate dehydrogenase of cytoplasm of, of human and lab. animal)
IT Cytoplasm
(glyceraldehyde phosphate dehydrogenase of, of blood cells of human and lab. animal)
IT Cell membrane
(glyceraldehyde phosphate dehydrogenase of, of erythrocytes of human)
IT Antibodies
RL: SPN (Synthetic preparation); PREP (Preparation)
(to glyceraldehyde phosphate dehydrogenase, of erythrocytes of human, prepn. and characterization of)
IT Leukocyte
(polymorphonuclear, glyceraldehyde phosphate dehydrogenase of cytoplasm of, of human)
IT 9001-50-7, Glyceraldehyde-3-phosphate dehydrogenase
RL: BIOL (Biological study)
(of erythrocyte membranes, of human)